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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/575,775

03/20/2007

Ron Daniel

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03/04/2009

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EXAMINER

CHAWAN, SHEELA C

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

03/04/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/575,775

Applicant(s)

DANIEL, RON

Examiner

SHEELA C. CHAWAN

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2006.
2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1-6 is/are allowed.
6) ☐ Claim(s) _____ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 12 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/ISD)
Paper No(s)/Mail Date 4/12/06
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Preliminary Amendment

2. Preliminary amendment filed on 4/12/06 has been entered.

Information Disclosure Statement

3. Information Disclosure Statement submitted on 4/12/2006 has been considered by the examiner.

Drawings

4. Drawings filed 4/12/2006 have been approved by the examiner.

Oath/Declaration

5. It does not identify the citizenship of an inventor.

It does not identify the city and either state or foreign country of residence of an inventor. The residence information may be provided on either an application data sheet or supplemental oath or declaration.

Allowable Subject Matter

6. The following is a statement of reasons for the indication of allowable subject matter:

Claims 1-6 are allowed.

The present invention is directed to a scanning system for constructing a three-dimensional model of an object, the scanning system comprising, among other things,

"a scanning template member having a known two-dimensional template, and a processing means to generate data to enable construction of a three- dimensional model of an object placed between the scanning device and the scanning template, the processing means being arranged, when in use, to generate information about the object relative to the scanning template, this information being generated from the same image onto which the projected light is projected by the emitter".

The closest prior art to Shibata et al. (US 5,848,188) disclose a shape measuring device for measuring a three-dimensional shape of an object by using optical means in a non-contact fashion, and more particularly to a shape measuring device which can perform stable measurement by using a rotating mirror rotating at a high speed.

The closest prior art to Mengel et al. (US 6,373,557 B1) disclose a method and apparatus for generating three-dimensional range images of spatial objects, wherein a short-time illumination of the object is performed, for instance using laser diodes. An image sensor is used that has a high light sensitivity, pixel resolution and can be read out randomly, this sensor also having an integration time that can be adjusted for each pixel. By evaluating the backscattered laser pulses in two integration windows with different integration times and by averaging over several laser pulses, three-dimensional range images can be picked up with a high reliability in, for example, 5 ms at the most.

Sato et al. (US 4,794,262) discloses a method and apparatus for measuring profile of three-dimensional object.

None of the prior art fairly teaches or suggests the above key features in combination with the other features of the claimed invention.

This application is in condition for allowance except for the following formal matters:

See paragraph 4 of this Office action.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Other prior art cited

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Aiken et al., (US.6,590,640 B1) discloses method and apparatus for mapping three-dimensional features.

Raskar (US. 20030038822 A1) discloses method for determining image intensities of projected images to change the appearance of three-dimensional objects.

Cato (US. 20040223663 A1) discloses apparatus and method for determining whether machine readable information on an item matches the item.

Tecu et al., (US. 7,149,010 B2) discloses template, system and method for automated selection of media type and scanning routine.

Schulz (US, 5,920,395) discloses system for locating relative positions of objects in three- dimensional space.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHEELA C. CHAWAN whose telephone number is (571)272-7446. The examiner can normally be reached on 7.30- 5.00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Werner can be reached on 571-272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sheela C Chawan/

2/28/09

Primary Examiner, Art Unit 2624